

**Collaborative Terminology Tooling & Data
Management (CTT&DM)**

Native Domain Standardization (NDS)

**Medications Dosage Form Pharmacy Data
Management (PSS*1.0*211)**

**Deployment, Installation, Back-Out, and Rollback
Guide**



Version 1.1

March 2018

Department of Veterans Affairs

Office of Information and Technology (OI&T)

Revision History

Date	Version	Description	Author
03/2018	1.1	<p>Updates per the Application Coordinator.</p> <p>Section 3.2.1 change figure 1 to description.</p> <p>Section 3.3.3 update description of patch release order.</p> <p>Section 4.2.1 corrected verbiage for backed up items.</p> <p>Section 4.3 corrected verbiage about documentation types.</p> <p>Section 4.7.1 updated description of dependencies for this patch.</p> <p>Section 4.8 corrected tense for file creation. Removed creating a backup transport global from step 4. Combined the verbiage for steps 6 and 7 to make an updated step 6. Updated verbiage for step 11.</p> <p>Section 4.9 update figures to include brief output for file 50.60699.</p> <p>Section 5 item (b) included section number 4.8 from step 5.</p> <p>Section 5.6.1 updated figure 10 and items for correct transport global install.</p> <p>Section 5.6.2 added verbiage that the alternate method is not recommended.</p> <p>Updated figure 14 and items for correct transport global install.</p>	DG Developer ManTech Mission Solutions and Services
03/2018	1.0	Delivery to Customer.	DG Developer ManTech Mission Solutions and Services

Table of Contents

1	Introduction	1
1.1	Purpose	1
1.2	Dependencies	1
1.3	Constraints	1
2	Roles and Responsibilities.....	1
3	Deployment	2
3.1	Timeline.....	2
3.2	Site Readiness Assessment.....	2
3.2.1	Deployment Topology (Targeted Architecture).....	3
3.2.2	Site Information (Locations, Deployment Recipients).....	3
3.2.3	Site Preparation	3
3.3	Resources	3
3.3.1	Facility Specifics.....	3
3.3.2	Hardware	3
3.3.3	Software.....	3
3.3.4	Communications.....	4
3.3.4.1	Deployment/Installation/Back-Out Checklist	4
4	Installation.....	4
4.1	Pre-installation and System Requirements.....	4
4.2	Platform Installation and Preparation.....	4
4.2.1	Pre/Post Installation Overview	4
4.3	Download and Extract Files.....	4
4.4	Database Creation	5
4.5	Installation Scripts	5
4.6	Cron Scripts.....	5
4.7	Access Requirements and Skills Needed for the Installation.....	5
4.7.1	Patch Dependencies.....	6
4.7.2	Pre-Installation Instructions	6
4.8	Installation Procedure.....	6
4.9	Installation Verification Procedure	8
4.10	System Configuration	10
4.11	Database Tuning.....	10
5	Back-Out Procedure	11
5.1	Back-Out Strategy	11
5.2	Back-Out Considerations	11
5.2.1	Load Testing	11

5.2.2	User Acceptance Testing	11
5.3	Back-Out Criteria	11
5.4	Back-Out Risks	11
5.5	Authority for Back-Out	12
5.6	Back-Out Procedure	12
5.6.1	Preferred Back-Out Method:	12
5.6.2	Alternate (Manual) Back-Out Method	14
5.6.2.1	Manual deletion of Data Dictionaries	14
5.7	Back-out Verification Procedure	17
5.7.1	Routines	18
5.7.2	Data Dictionaries	18
6	Rollback Procedure	19
6.1	Rollback Considerations	19
6.2	Rollback Criteria	19
6.3	Rollback Risks	19
6.4	Authority for Rollback	19
6.5	Rollback Procedure	19
6.6	Rollback Verification Procedure	19

1 Introduction

This document describes how to deploy and install the Medications Dosage Form Native Domain Standardization (NDS) patch PSS*1.0*211; as well as how to back-out the product and rollback to a previous version or data set. This document is a companion to the project charter and management plan for this effort.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the Medications Dosage Form NDS patch PSS*1.0*211 will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

The Medications Dosage Form NDS Pharmacy Data Management patch PSS*1.0*211 possesses a direct application dependency on the VistA Pharmacy Data Management v1.0 application, and Health Data & Informatics (HDI) patch HDI*1.0*21.

Patch PSS*1.0*211 possesses an indirect application dependency on Kernel patch XU*8.0*686. Enforcement of this dependency will be achieved by the patch HDI*1.0*21 direct dependency on XU*8.0*686.

1.3 Constraints

Medications Dosage Form Native Domain Standardization patch PSS*1.0*211 possesses the following constraints:

- The update to the VistA DOSAGE FORM file (#50.606) shall not affect the current functionality or conflict with applications that utilize this file.
- The new MASTER DOSAGE FORM file (#50.60699) shall not affect the current functionality or conflict with applications that utilize this file.
- The fields being added to these files should only be visible on the back end and to those requesting the information, not the Graphical User Interface (GUI) applications used by clinicians within the VA.

2 Roles and Responsibilities

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
	OIT Regional Support	Deployment	Test for operational readiness	
	OIT Regional Support	Deployment	Execute deployment	

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
	OIT Regional Support	Installation	Plan and schedule installation	
	CTT&DM NDS Project Team	Installation	Coordinate training	
	OIT Regional Support	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	
	CTT&DM NDS Project Team	Post Deployment – Warranty Period	Hardware, Software and System Support	
	OIT Regional Support	Post Deployment – Warranty Period	Hardware, Software and System Support	

3 Deployment

The deployment is planned as a concurrent online rollout. During IOC testing and after national release, patch PSS*1.0*211 will be distributed via the FORUM Patch Module, and may be deployed at any site without regard to deployment status at other sites.

3.1 Timeline

The deployment and installation is scheduled to run for a period of thirty days, as depicted in the master deployment schedule.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the CTT&DM NDS patch PSS*1.0*211 deployment. The PSS*1.0*211 patch must be manually installed, or manually queued for installation at each VistA instance at which it is deployed, using the standard Kernel Installation Distribution System (KIDS) software. The PSS*1.0*211 patch should be installed at all VA VistA instances running the VistA Pharmacy Data Management 1.0 application, and will update the M (Mumps) server software in each VistA instances Pharmacy Data Management namespace (PSS).

3.2.1 Deployment Topology (Targeted Architecture)

The deployment topology for the CTT&DM NDS patch PSS*1.0*211 during IOC testing and after national release is described below.

Members of the Information Technology Operations and Services (ITOPS) Office of Information and Technology (OI&T) get the nationally released VistA patch from the VistA National Patch Module and install the patch in the VA facilities that are their responsibility.

3.2.2 Site Information (Locations, Deployment Recipients)

During IOC testing, CTT&DM NDS patch PSS*1.0*211 will be deployed at the following sites:

REDACTED

After national release, CTT&DM NDS patch PSS*1.0*211 will be deployed at all sites running the VistA Pharmacy Data Management v.1.0 application.

3.2.3 Site Preparation

No preparation is required by the site prior to deployment.

3.3 Resources

Deployment of CTT&DM NDS patch PSS*1.0*211 requires a fully patched VistA environment running the Pharmacy Data Management v.1.0 application, as well as a Health Product Support (HPS) team member available to perform the patch installation.

3.3.1 Facility Specifics

There are no facility-specific deployment or installation features of CTT&DM NDS patch PSS*1.0*211.

3.3.2 Hardware

CTT&DM NDS patch PSS*1.0*211 requires no site hardware specifications during, or prior to deployment.

3.3.3 Software

There are three patches that will be released at the same time and should be installed together in the following order: XU*8.0*686, HDI*1.0*21, and then PSS*1.0*211. PSS*1.0*48 is not part of this patch grouping but is a prerequisite for PSS*1.0*211. The following table describes software specifications required at each site prior to deployment.

Table 2: Software Specifications

Required Software	Make	Version	Configuration	Manufacturer	Other
PSS*1.0*48	VistA	2.0	Standard	VHA	
HDI*1.0*21	VistA	1.0	Standard	VHA	
XU*8.0*686	VistA	8.0	Standard	VHA	Indirect dependency, required by HDI*1.0*21

Please see [Table 1](#) in the Roles and Responsibilities section for details about who is responsible for preparing the site to meet these software specifications.

3.3.4 Communications

No notifications are required for deployment of CTT&DM NDS Patch PSS*1.0*211.

3.3.4.1 Deployment/Installation/Back-Out Checklist

The Release Management team will deploy the patch PSS*1.0*211, which is tracked in the National Patch Module (NPM) in Forum, nationally to all VAMCs. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed in the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch in their VistA production systems. Therefore, this information does not need to be manually tracked in the chart below.

Table 3: Deployment/Installation/Back-Out Checklist

Activity	Day	Time	Individual who completed task
Deploy	N/A	N/A	N/A
Install	N/A	N/A	N/A
Back-Out	N/A	N/A	N/A

4 Installation

4.1 Pre-installation and System Requirements

4.2 Platform Installation and Preparation

Patch PSS*1.0*211 does not require any platform installation or preparation.

4.2.1 Pre/Post Installation Overview

This patch may be installed with users on the system, although it is recommended that it be installed during non-peak hours to minimize potential disruption to users. This patch should take less than five minutes to install.

A patch backup should be created prior to installing PSS*1.0*211 to save routines that are modified by the patch. Backing out the patches new software components must be done by installing 'back-out' KIDS build PSS*1.0*00211, created specifically to back-out changes installed by PSS*1.0*211. Please refer to [Section 5](#) Back-Out Procedure of this guide for details of the back-out procedure.

4.3 Download and Extract Files

CTT&DM NDS Patch PSS*1.0*211 is being released as a FORUM Patch via the Patch Module. Documentation describing the new functionality introduced by this patch is available. The preferred method is to retrieve files from download.vista.med.va.gov. This transmits the files from the first available server. Sites may also elect to retrieve files directly from a specific server.

Sites may retrieve the software and/or documentation directly using Secure File Transfer Protocol (SFTP) from the **REDACTED**:

- **REDACTED**
- **REDACTED**

Documentation can also be found on the VA Software Documentation Library (VDL) at the VA VDL website.

Title: Pharmacy Data Management User Manual

File Name: pss_1_um_r0318.docx

pss_1_um_r0318.pdf

FTP Mode: Binary

Title: Pharmacy Data Management Technical Manual

File Name: pss_1_tm_r0318.docx

pss_1_tm_r0318.pdf

FTP Mode: Binary

Title: Deployment, Installation, Back-Out, Rollback Guide PSS*1.0*211

File Name: pss_1_p211_ig.docx

pss_1_p211_ig.pdf

FTP Mode: Binary

4.4 Database Creation

No new database is required for the CTT&DM NDS patch PSS*1.0*211.

4.5 Installation Scripts

No installation scripts are required for installation of CTT&DM NDS patch PSS*1.0*211.

4.6 Cron Scripts

No CRON scripts are required for installation of CTT&DM NDS patch PSS*1.0*211.

4.7 Access Requirements and Skills Needed for the Installation

Access to national VA network, as well as the local network of each site to receive CTT&DM NDS patch PSS*1.0*211 is required to perform the installation, as well as authority to create and install patches.

Knowledge of, and experience with the Kernel Installation and Distribution System (KIDS) software is required. For more information, refer back to the Kernel Installation and Distribution System link found in [Section 4.7.1](#) Patch Dependencies.

4.7.1 Patch Dependencies

Patches PSS*1.0*48 and HDI*1.0*21 must be installed prior to installing this patch. Patch HDI*1.0*21 and patch XU*8.0*686 will be nationally released at the same time as patch PSS*1.0*211.

Knowledge of, and experience with, the Kernel Installation and Distribution System (KIDS) software is required. For more information, see Section V, Kernel Installation and Distribution System, in the [Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide](#).

Patch HDI*1.0*21 and patch XU*8.0*686 will be nationally released on or before PSS*1.0*211 patch is released. The order of install is XU*8.0*686, HDI*1.0*21, then PSS*1.0*211.

The XU and HDI patches are in support of the Standards and Terminology Services (STS) deployment methodology.

4.7.2 Pre-Installation Instructions

There are no specific pre-installation instructions related to patch PSS*1.0*211.

4.8 Installation Procedure

A new file, MASTER DOSAGE FORM (#50.60699) will be created. This file ^PSMDF(50.60699) is of minimal size (less than 400k) with a low growth expectation. Please provide this information to your facility VistA System Administrator for their awareness.

Installation Instructions:

- 1) Choose the PackMan message containing this patch.
- 2) Choose the INSTALL/CHECK MESSAGE PackMan option.
- 3) From Kernel Installation and Distribution System Menu, select the Installation Menu.
- 4) From the Installation Menu, you may elect to use the following options:
 - a. Compare Transport Global to Current System - This option will allow you to view all changes that will be made when this patch is installed. It compares all components of this patch (routines, DDs, templates, etc.).
 - b. Verify Checksums in Transport Global - This option will allow you to ensure the integrity of the routines that are in the transport global.
- 5) Select Backup a Transport Global.
 - a) When prompted for the INSTALL NAME, enter PSS*1.0*211.
 - b) Accept the default Subject, and send the patch backup to yourself and copy other personnel with programmer access that might be responsible for installing the patch at the facility.
 - c) After entering all recipients, press ENTER at the final "And Send to:" prompt to return to the Installation Menu.
- 6) From the Installation Menu, select the Install Package(s) option. When prompted for the INSTALL NAME, enter the patch PSS*1.0*211
- 7) When prompted 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//', respond NO.

- 8) When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//', respond NO.
- 9) When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//', respond NO.
- 10) If prompted 'Delay Install (Minutes): (0 - 60): 0//' respond 0.
- 11) If one of the informational messages below is not displayed on the Installers screen please contact the CTT&DM NDS Team. If the screen scrolls to fast and scroll back is not available the Installer can use FileMan Inquiry to check the INSTALL File (#9.7) or use the option: Install File Print [XPD PRINT INSTALL FILE] to confirm one of the two messages displayed during the installation.

Figure 1: Example Informational message if the 50.60699 has already been seeded at the facility.

```
File: 50.60699 Has already been seeded. Status is: 4  
***** Post-installation of Patch PSS*1.0*211 HDIS 'seeding' has been halted.  
***** Please contact Enterprise Vista Support.
```

Figure 2: Example Informational message that seeding is complete and that STS has been notified.

```
File: 50.60699 Has been 'seeded'. Message Number:  
***** Post-installation of Patch PSS*1.0*211 HDIS 'seeding' MASTER DOSAGE FORM file  
(#50.60699) has Completed.  
***** An update message has been sent to Enterprise Vista Support.
```

4.9 Installation Verification Procedure

The software components installed with CTT&DM NDS patch PSS*1.0*211 are data dictionaries and routines. Successful installation of data dictionaries may be verified by running the FileMan List File Attributes option from the Data Dictionary Utilities menu after installation, for the following files and fields installed with the patch.

MASTER DOSAGE FORM file (#50.60699)

Fields: ALL

DOSAGE FORM file (#50.606)

Fields: MASTER DOSAGE FORM field (#90)

The new fields will print in the output if the installation was successful.

Figure 3: Output, verification of MASTER DOSAGE FORM file (#50.60699) installed using FileMan Data Listing

```
D P^DI
VA FileMan 22.2
Select OPTION: DATA DICTIONARY UTILITIES
Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES
  START WITH What File: PERSON CLASS// 50.60699  MASTER DOSAGE FORM
                                (233 entries)
      GO TO What File: MASTER DOSAGE FORM//    (233 entries)
      Select SUB-FILE:
Select LISTING FORMAT: STANDARD// BRIEF
ALPHABETICALLY BY LABEL? No//    (No)
Start with field: FIRST//
DEVICE: ;;999  secure    Right Margin: 80//
BRIEF DATA DICTIONARY #50.60699 -- MASTER DOSAGE FORM FILE      3/13/18    PAGE 1
SITE: TEST.ST-LOUIS.MED.VA.GOV  UCI: STLVETSDEV,ROU              (VERSION 1.0)
-----
RXNORM NAME                      50.60699,.01    FREE TEXT
                                Answer must be 2-60 characters in length.
RXCUI CODE                      50.60699,1      NUMBER
                                Type a number between 1 and 999999999, 0 decimal digits.
TERM TYPE                      50.60699,2      FREE TEXT
                                Answer must be 1-30 characters in length.
ASSOCIATED VA DOSAGE FORMS      50.60699,99  50.60699901
  Multiple
  ASSOCIATED VA DOSAGE FORM    50.60699901,.01  FREE TEXT
```

```

Enter the VA Dosage Form associated with this RxNorm Dosage Form. Answer must
be 3-30 characters in length.
REPLACED BY VHA STANDARD TERM  50.60699,99.97  POINTER
                                TO MASTER DOSAGE FORM FILE (#50.60699)

Enter the RxNorm term/concept that replaces this entry.
MASTER ENTRY FOR VOID          50.60699,99.98  SET
                                '1' FOR YES;
                                '0' FOR NO;

Enter YES if this is the Master entry for the dosage form Term/Concept.
VOID                            50.60699,99.99  FREE TEXT
                                Answer must be 1-20 characters in length.

EFFECTIVE DATE/TIME            50.60699,99.991  50.6069901  DATE
Multiple

EFFECTIVE DATE/TIME            50.6069901,.01    DATE

Enter the Date/Time the VOID status became effective.

STATUS                          50.6069901,.02    SET
                                '1' FOR ACTIVE;
                                '0' FOR INACTIVE;

Enter the Status of the RxNorm Dose Form Term/Concept.

```

Figure 4: Output, FileMan brief Data Listing verifying successful installation of DOSAGE FORM file (#50.606) fields

```

D P^DI
Select OPTION: DATA DICTIONARY UTILITIES
Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES
START WITH What File: DOSAGE FORM// 50.606  DOSAGE FORM
                                (63 entries)
GO TO What File: PERSON CLASS// 50.606  DOSAGE FORM
                                (63 entries)
Select SUB-FILE:
Select LISTING FORMAT: STANDARD// BRIEF
ALPHABETICALLY BY LABEL? No// (No)
Start with field: FIRST// MASTER DOSAGE FORM
Go to field: MASTER DOSAGE FORM
DEVICE: ;;999 DEC Windows Right Margin: 80// 132
BRIEF DATA DICTIONARY #50.606 -- DOSAGE FORM FILE 2/28/18 PAGE 1
SITE: TEST.ST-LOUIS.MED.VA.GOV UCI: STLVETSDEV,ROU (VERSION 1.0)
-----
MASTER DOSAGE FORM 50.606,90 POINTER

```

TO MASTER DOSAGE FORM FILE (#50.60699)

Enter the Master Dosage Form associated with this dosage form.

Successful installation of routines may be verified by running the CHECK1^XTSUMBLD utility from the command line after installation. The new routines will print, along with checksum values, if installation was successful.

Figure 5: Example, verification of routines installed by running CHECK1^XTSUMBLD

D CHECK1^XTSUMBLD

This option determines the current checksum of selected routine(s).

Select one of the following:

P

Package

B

Build

Build from: Build

This will check the routines from a BUILD file.

Select BUILD NAME: PSS*1.0*211

PHARMACY DATA MANAGEMENT

Figure 6: Output, CHECK1^XTSUMBLD after successful installation

PSS211PO value = 22029589

PSSNDSU value = 27691663

PSSNOUNR value = 15263848

done

4.10System Configuration

No system configuration is required before or after deployment of CTT&DM NDS patch PSS*1.0*211.

4.11Database Tuning

No database tuning is required before or after deployment of CTT&DM NDS patch PSS*1.0*211.

5 Back-Out Procedure

NOTE: Due to the complexity of this patch (because of the data dictionary changes), it is not recommended to perform a back-out. However, in the event that a site decides to back-out this patch, the site should contact the National Service Desk (NSD) to submit a CA SDM ticket; the development team will assist with the process.

Perform the back-out procedure by:

- a) First deleting new data dictionaries and routines by either installing KIDS build PSS*1.0*00211 or manually deleting the data dictionaries and routines.
- b) Restoring modified routines by installing the patch backup created in [Section 4.8 Installation Procedure, Step 5\) Select Backup a Transport Global](#), on [page 6](#) of the Installation Instructions.

The back-out is to be performed by persons with programmer-level access.

5.1 Back-Out Strategy

The CTT&DM NDS Team has created a back-out patch PSS*1.0*00211. If the facility has been approved to back-out the PSS*1.0*211, the NDS team would need to be contacted so that the PSS*1.0*00211 patch may be forwarded to them.

The Back-out Strategy is to first delete new data dictionaries and routines installed by patch PSS*1.0*211 by either installing back-out build PSS*1.0*00211, or manually deleting the new data dictionaries, files, and routines. After the new data dictionaries and routines have been removed, the modified routines may be restored by installing the patch backup created in the [Installation Procedure](#).

5.2 Back-Out Considerations

The back-out should only be done in the event that the local facility management determines that the patch PSS*1.0*211 is not appropriate for that facility, and should only be done as a last resort.

5.2.1 Load Testing

No load testing is required for patch PSS*1.0*211.

5.2.2 User Acceptance Testing

N/A.

5.3 Back-Out Criteria

Local Facility Management would need to determine patch PSS*1.0*211 is not appropriate for their facility.

5.4 Back-Out Risks

By backing out PSS*1.0*211, the local facility will lose interoperability capabilities of the Medications Dosage Form domain, specifically with regard to the DOSAGE FORM file (#50.606).

5.5 Authority for Back-Out

The Local Facility Management has the authority to back-out patch PSS*1.0*211.

5.6 Back-Out Procedure

NOTE: Due to the complexity of this patch, (because of the data dictionary changes), it is not recommended for performing a back-out. However, in the event that a site decides to back-out this patch, the site should contact the National Service Desk (NSD) to submit a CA SDM ticket; the development team will assist with the process.

Perform the preferred back-out procedure by installing KIDS build PSS*1.0*00211, or the alternate method of manually deleting the following components:

- a) MASTER DOSAGE FORM field (#90) from the DOSAGE FORM file (#50.606). This will also remove all data.
- b) MASTER DOSAGE FORM file (#50.60699). This will also remove all data.
- c) Routines PSS211PO, PSSNDSU.

The back-out is to be performed by persons with programmer-level access, and in conjunction with the STS Team. The following should be executed from the programmers prompt.

5.6.1 Preferred Back-Out Method:

1. Load KIDS build PSS*1.0*00211:
 - a) Find and select Mailman message containing PSS*1.0*00211.
 - b) Extract and Load PackMan Message from the 'Enter message action' prompt:

Figure 7. Example, extract and load PackMan message PSS*1.0*00211

```
Enter message action (in IN basket): Ignore// Xtract KIDS
Select PackMan function: 6  INSTALL/CHECK MESSAGE
Line 3      Message #198245      Unloading KIDS Distribution      PSS*1.0*00211
OK to continue with Load? NO// YES
Want to Continue with Load? YES//
Loading Distribution...
PSS*1.0*00211
```

- c) From the Install Package(s) option in the Installation menu in the Kernel Installation and Distribution System [XPD MAIN] menu, install PSS*1.0*00211.

Figure 8. Example, installation PSS*1.0*00211 KIDS build

```
Select Kernel Installation & Distribution System <TEST ACCOUNT> Option:
INSTallation
Select Installation <TEST ACCOUNT> Option: INSTall Package(s)
Select INSTALL NAME: PSS*1.0*00211      7/5/17@12:18:03
=> PSS*1.0*00211 v1 Back-Out PSS*1*211
```


[illegible]

- 1b) Restore the backup patch Transport Global created during the installation (Section [4.8](#)).
 - d) Find and select Mailman message Transport Global backup of PSS*1.0*211.
 - e) Extract and Load PackMan Message from the ‘Enter message action’ prompt:

```
Enter message action (in IN basket): Ignore// Xtract KIDS
Select PackMan function: 6  INSTALL/CHECK MESSAGE
```

```

Warning:  Installing this message will cause a permanent update of globals
and routines.

Do you really want to do this? NO// YES

Routines are the only parts that are backed up.  NO other parts
are backed up, not even globals.  You may use the 'Summarize Message' option of
PackMan to see what parts the message contains.

Those parts that are not routines should be backed up separately if they need to be
preserved.

Shall I preserve the routines on disk in a separate back-up message? YES// NO
No backup message built.

Line 2      Message #1151616   Unloading Routine   PSOMLLD2 (PACKMAN_BACKUP)
Line 87     Message #1151616   Unloading Routine   PSONEW2 (PACKMAN_BACKUP)
Line 225    Message #1151616   Unloading Routine   PSORN52 (PACKMAN_BACKUP)

Select PackMan function:

```

5.6.2 Alternate (Manual) Back-Out Method

The following involves manual deletion of Data Dictionaries (DD's) and routines, and will need to be executed from the programmers prompt. This procedure must be performed by persons with programmer-level access and in conjunction with the STS Team.

Disclaimer: Use of the alternate method is not recommended and should only be done by upper level programmers.

5.6.2.1 Manual deletion of Data Dictionaries

Manually delete the MASTER DOSAGE FORM file (#50.60699), and delete the MASTER DOSAGE FORM field (#90) from the DOSAGE FORM file (#50.606).

Use File Manager to delete the new fields added with PSS*1.0*211.

Delete the MASTER DOSAGE FORM field (#90) from the DOSAGE FORM (#50.606) file:

- i. Select FileMan option MODIFY FILE ATTRIBUTES.
- ii. At the Select FIELD prompt, enter 'MASTER DOSAGE FORM'
- iii. At the 'LABEL' prompt, enter "@".
- iv. At the prompt "SURE YOU WANT TO DELETE THE ENTIRE 'MASTER DOSAGE FORM' FIELD?" enter YES.
- v. At the prompt "OK TO DELETE 'MASTER DOSAGE FORM' FIELDS IN THE EXISTING ENTRIES?" enter YES.

Figure 10. Example, manual deletion of MASTER DOSAGE FORM field (#90) from DOSAGE FORM

file (#50.606):

```
VA FileMan 22.2
Select OPTION: MODIFY FILE ATTRIBUTES
Modify what File: DOSAGE FORM//          (63 entries)
Select FIELD: MASTER DOSAGE FORM
LABEL: MASTER DOSAGE FORM// @
      SURE YOU WANT TO DELETE THE ENTIRE 'MASTER DOSAGE FORM' FIELD? Y  (Yes)
OK TO DELETE 'MASTER DOSAGE FORM' FIELDS IN THE EXISTING ENTRIES? Yes// Y
```

Delete the MASTER DOSAGE FORM file (#50.60699):

- i. Select FileMan option UTILITY FUNCTIONS.
- ii. At the UTILITY OPTION prompt, select EDIT FILE.
- iii. At the 'Modify what File' prompt, enter MASTER DOSAGE FORM.
- iv. At the "NAME" prompt, enter "@".
- v. At the prompt "DO YOU WANT JUST TO DELETE THE <nn> FILE ENTRES & KEEP THE FILE DEFINITION?", enter NO.
- vi. At the prompt, "IS IT OK TO DELETE THE '^PSMDF(50.60699' GLOBAL?", enter YES.
- vii. At the prompt, "SURE YOU WANT TO DELETE THE ENTIRE 'MASTER DOSAGE FORM' FILE?", enter YES.

Figure 11. Example: Manual Deletion of MASTER DOSAGE FORM file (#50.60699)

```
VA FileMan 22.2
Select OPTION: UTILITY FUNCTIONS
Select UTILITY OPTION: EDIT FILE
Modify what File: MASTER DOSAGE FORM// (15 entries)
Do you want to use the screen-mode version? YES// NO
NAME: MASTER DOSAGE FORM// @
POINTED TO BY: PARENT field (#2) of the MASTER DOSAGE FORM File (#50.60699)
                REPLACED BY VHA STANDARD TERM field (#99.97) of the MASTER TYPE
                OF PLAN File (#50.60699)
DO YOU WANT JUST TO DELETE THE 15 FILE ENTRIES,
    & KEEP THE FILE DEFINITION? No// (No)
IS IT OK TO DELETE THE '^PSMDF(50.60699)' GLOBAL? Yes// Y (Yes)
SURE YOU WANT TO DELETE THE ENTIRE 'MASTER DOSAGE FORM' FILE? Y (Yes)
Deleting the DATA DICTIONARY...
Deleting the INPUT TEMPLATES...
Deleting the PRINT TEMPLATES...
Deleting the SORT TEMPLATES...
Deleting the FORMS...
Deleting the BLOCKS...
```

a) Manual deletion of Routines PSSNDSU and PSS211PO.

The deletion of a routine is a potentially dangerous activity. This procedure must be performed by persons with programmer-level access; and in conjunction with the STS Team.

- i. From the ROUTINE MANAGEMENT MENU [XUROUTINES], select the DELETE ROUTINES [XTRDEL] option. **IMPORTANT:** When prompted for 'All Routines?', enter NO.
- ii. At the 'Routine:' prompt, enter PSS211PO.
- iii. At the next 'Routine:' prompt, enter PSSNDSU.
- iv. At the next 'Routine:' prompt, press <Enter>.
- v. At the prompt '3 routines to DELETE, OK:'. enter YES.

Figure 12. Example, manual deletion of routines PSS211PO, PSSNDSU using option DELETE ROUTINES [XTRDEL]

```
Select OPTION NAME: ROUTINE MANAGEMENT MENU  XUROUTINES      Routine Management Menu
    Bring in Sent Routines
    Delete Routines
    First Line Routine Print
```

```

List Routines
Move Routines across Volume Sets
Select OPTION NAME: DELETE ROUTINES  XTRDEL      Delete Routines
Delete Routines
ROUTINE DELETE
All Routines? No => No
Routine: PSS211PO
Routine: PSSNDSU
Routine:
2 routine
2 routines to DELETE, OK: NO// Y
PSS211PO
PSSNDSU
Done.

```

b) Restore of Transport Global backup of PSS*1.0*211.

Restore the backup patch Transport Global created during the [Section 4.8](#). Installation Procedure.

- 1) Find and select Mailman message Transport Global backup of PSS*1.0*211.
- 2) Extract and Load PackMan Message from the 'Enter message action' prompt.

Figure 13. Example, extract and load Transport Global backup of PSS*1.0*211:

```

Enter message action (in IN basket): Ignore// Xtract KIDS
Select PackMan function: 6  INSTALL/CHECK MESSAGE
Warning:  Installing this message will cause a permanent update of globals
and routines.
Do you really want to do this? NO// YES
Routines are the only parts that are backed up.  NO other parts are backed up, not
even globals.  You may use the 'Summarize Message'option of PackMan to see what
parts the message contains. Those parts that are not routines should be backed up
separately if they need to be preserved.
Shall I preserve the routines on disk in a separate back-up message? YES// NO
No backup message built.
Line 2      Message #1151616   Unloading Routine   PSOMLLD2 (PACKMAN_BACKUP)
Line 87     Message #1151616   Unloading Routine   PSONEW2 (PACKMAN_BACKUP)
Line 225    Message #1151616   Unloading Routine   PSORN52 (PACKMAN_BACKUP)
Select PackMan function:

```

5.7 Back-out Verification Procedure

5.7.1 Routines

Successful back-out of the routines installed by the patch may be verified by running the CHECK1^XTSUMBLD utility from the programmer prompt for PSS*1.0*211. If the back-out was successful, the message “Routine not in this UCI” will display next to each new routine, and routine PSSNOUNR checksum should be the pre-PSS*1*211 checksum value: B13687213.

Figure 14. Example, CHECK1^XTSUMBLD of routines installed by patch PSS*1.0*211

```
D CHECK1^XTSUMBLD
New CheckSum CHECK1^XTSUMBLD:
This option determines the current checksum of selected routine(s).
    Select one of the following:
        P      Package
        B      Build
Build from: Build
This will check the routines from a BUILD file.
Select BUILD NAME: PSS*1.0*211      PHARMACY DATA MANAGEMENT
PSS211PO  Routine not in this UCI.
PSSNOUNR  value = B13687213
PSSNDSU   Routine not in this UCI.
done
```

5.7.2 Data Dictionaries

Successful back-out of the fields and file installed by the patch may be verified by running a global listing from the VistA server command line after installation.

The verification of successful data dictionary back-out consists of verifying the MASTER DOSAGE FORM field (#90) in the DOSAGE FORM file (#50.606) was successfully deleted and no longer exists.

Figure 15. Example, global listing of backed out MASTER DOSAGE FORM field (#90) in the DOSAGE FORM file (#50.606)

```
D ^%G
Device:
Right Margin:
Screen size for paging (0=nopaging)? =>
Global ^DD(50.606,90
<nothing should print>
```

Figure 16. Example, global listing after backing out MASTER DOSAGE FORM file (#50.60699)

```
D ^%G
Device:
Right Margin:
Screen size for paging (0=nopaging)? =>
Global ^DD(50.60699,
<nothing should print>
```

6 Rollback Procedure

N/A

6.1 Rollback Considerations

N/A

6.2 Rollback Criteria

N/A

6.3 Rollback Risks

N/A

6.4 Authority for Rollback

N/A

6.5 Rollback Procedure

N/A

6.6 Rollback Verification Procedure

N/A